

DEFORMITIES OF THE ABDOMINAL WALL-OMPHALOCELE AND GASTROSCHISIS-IN TWO STILLBORN BABIES

Nasuhi Engin AYDIN*, M.D., A.Nezih KÖK**, M.D.,
Sinan SÖNMEZ***, M.D., Cemal GÜNDÖĞDU*, M.D.

Atatürk University, Faculty of Medicine, Departments of Pathology*, Forensic Medicine** and Genetics***, Erzurum, Turkey
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SUMMARY : Two stillborn babies both at their seventh month of gestation with prominent abdominal wall defects are presented. One of them showed a large hernia of the umbilical cord and the other had intra-abdominal contents eviscerated without any covering sac. Associated anomalies were seen in both.

Key Words : Abdominal Wall Deformity, Omphalocele, Gastroschisis.

Omphalocele and gastroschisis are deformities of the abdominal wall which may cause serious problems during neonatal period (Guzzetta et al. 1988). Additionally, these defects can be observed in stillborn babies reflecting the potential lethality of these disorders. We present two stillborn babies having this sort of congenital defects with additional anomalies.

CASE REPORTS

Case 1 : A 19-year-old woman had premature labor at the seventh month her first pregnancy. The product of gestation was a stillborn female fetus with anencephaly and craniorachisis (Pathology accession no. 5019-73). In addition, a large abdominal defect about 5 cm in diameter with abdominal contents protruding and enclosed in a translucent sac was noticed. The umbilical cord was attached to the lower part of the sac. The crown-heel length was 200 mm and the attached placenta was 12x8x3.5 cm in dimensions with complete cotyledons and partially hemorrhagic appearance. The sac was ruptured on the left side revealing the intestines and the liver (Fig 1, 2). The microscopic sections of the concep-

tus did not show any specific finding.

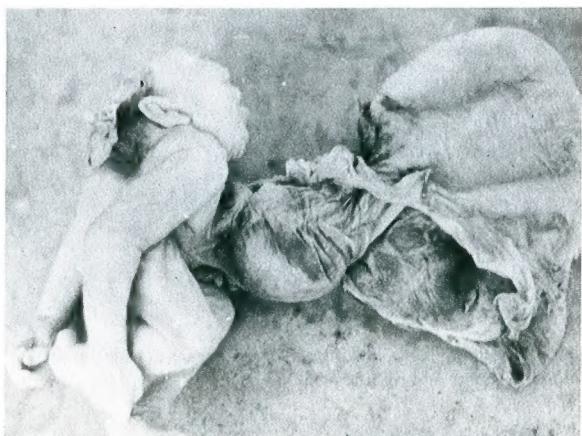


Fig. 1 : Anencephalic stillborn baby with a sac containing the umbilical cord.

Case 2 : A 24-year-old woman with gravida 3, abortus 0 was seen in her seventh month of gestation due to vaginal bleeding. An abdominal ultrasound examination revealed placenta previa totalis. A stillborn female fetus was expelled by induced la-

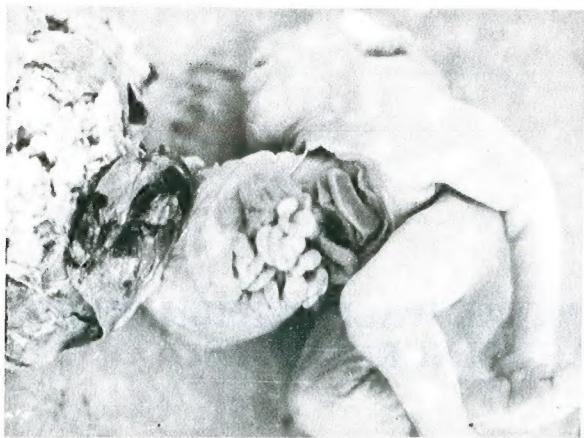


Fig. 2 : Left side of the sac revealing abdominal contents.

bor. The crown-heel length was 300 mm and the weight was 750 gm (Pathology accession no. 4535-89). The abdominal organs were seen to be eviscerated through a large defect of the abdominal wall. The protruding organs were dull red in colour and the skin was pink. The right lower extremity was quite short (4 cm) with talipes varus appearance and hypermobility of the hip joint (Fig 3). Microscopic sections could not be evaluated due to autolysis.



Fig. 3 : Stillborn baby showing abdominal organs outside the abdominal cavity and right leg anomaly.

DISCUSSION

Deformities of the abdominal wall show a wide spectrum of anomalies ranging from simple umbilical hernia to the severest form extrophy of the cloaca (Guzzetta et al. 1988). Omphalocele and gastroschisis are regarded as defects that are generally compatible with life. However, these defects may pose serious problems during the neonatal period especially when they are large and compli-

cated with additional anomalies (Guzzetta et al. 1988; Grosfeld and Clatworthy, 1969; Shim, 1971).

The first case that we present has features of omphalocele with umbilical cord attached to the lower side. Associated anomalies are reported frequently in omphalocele and in 11 large series this was given as 67 per cent, among which McKeown et al showed anencephaly as 20 per cent (Baird and McDonald, 1981). Gastroschisis shows a lower incidence of associated anomalies, these may consist of congenital heart defects, diaphragm and sternal defects in addition to complete rotation of the mid-gut (Baird and McDonald, 1981; Guzzetta et al. 1988).

Both of our cases showed major congenital anomalies besides abdominal defect. A shortened right lower extremity with hip joint hypermobility and talipes varus is not uncommon in anencephaly and omphalocele is not an unexpected finding.

The familial occurrence of these conditions are very rarely reported. A family in which the omphalocele was present in two generations and another family with four males in two generations suggesting sex linked recessive trait were reported (Havalad et al. 1979). Also, the rare occurrence of gastroschisis in families with histories of abdominal wall defects are in record (Salinas et al. 1979). We could not ascertain any relative with similar defects in the families of our cases.

Chromosomes should be examined in all cases of omphalocele to give an accurate diagnosis in regard to trisomies of 13, 18 and 21 (Salinas et al. 1979). Special syndromes such as extrophy of the cloaca (vesicointestinal fissure) and the Beckwith-Wiedeman constellation of anomalies also include omphalocele (Baird and McDonald, 1981; Guzzetta et al. 1988; Salinas et al. 1979).

These two stillborn babies are in record of our Pathology Laboratory functioning since 1967. We cannot give any estimation of these anomalies in our community. Epidemiological studies give variable results but a combined incidence of these two defects together was reported as one in 3448 live births in a comprehensive study (Baird and McDonald, 1981). It is thought that between one-third and one half of infants with omphalocele and gastroschisis are stillborn (Baird and McDonald, 1981; Salinas et al. 1979).

Correspondence to : Dr.Ahmet Nezih KÖK
Atatürk Üniversitesi Tıp Fakültesi
Adli Tip Anabilim Dalı
ERZURUM - TÜRKİYE
Phone : 9 - 011 - 14120 / 2175

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